Monitoring Quality of Care in Family Planning Programs: A Comparison of Observation and Client Exit Interviews

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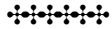

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Monitoring Quality of Care in Family Planning Programs: a Comparison of Observation and Client Exit Interviews

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Abstract

As part of an ongoing initiative to identify efficient, reliable methods of monitoring quality of care in family planning programs, the Quick Investigation of Quality (QIQ) was developed and field-tested in multiple countries in 1998-99. The current analysis examines the comparability of results between observations and exit interviews on selected indicators using data from three countries (Ecuador, Uganda, and Zimbabwe).

These two instruments differ somewhat in the type of information collected, yet there is considerable overlap. For example, observation is better at measuring accuracy of information during counseling and technical competence of the provider, whereas exit interviews provide the client's perspective on the services received. However, the two converge when clients report on the providers' actions during counseling and clinical examination.

The researchers compared frequencies on selected indicators available from both instruments and calculated Kappa coefficients for agreement after linking data from observation and exit interviews for the same client. Although levels would vary across countries for a given indicator, within a country results were consistent between instruments. Agreement was good to excellent on many of the indicators.

These data provide evidence that the QIQ is a reliable means of monitoring QC in family planning programs. Moreover, a number of the QC indicators can be obtained from either data collection method, raising the question of whether full implementation of both instruments is always needed. Although some programs may opt for one instrument over the other due to resource constraints, the combination provides a fuller assessment of QC.

Background

During the 1990s, quality of care became a central focus for the international family planning/reproductive health community. Work over the past decade in this area has been guided by the Bruce/Jain framework that outlines six elements of quality: choice of method, information to the client, technical competence, interpersonal relations, mechanisms to encourage continuity, and constellation of services (1). Other organizations have adopted variations on this theme, such as the Client Bill of Rights, later amended to the Client and Provider Bill of Rights, by the International Planned Parenthood Federation.

With this increased focus on quality, there has been a parallel interest in developing means of measuring quality, for several reasons. First, client-provider interactions can be understood as intervening elements in a causal chain through which organized family planning efforts meet or generate demand for fertility regulation (2). Learning more about these processes with the aim of improving them can have important programmatic payoff. Second, many programs have undertaken activities to improve quality of care in their facilities. Without measurement tools, it is impossible to know whether these activities have achieved their objective. Third, management sends a message to staff that "quality is important" by investing resources in measuring it. As such, measurement further reinforces initiatives to improve quality.

The challenge in measuring quality is the complexity of the topic. Although the Bruce/Jain framework outlines six elements of quality, there are literally hundreds of possible "sub-elements" that might be measured. A Task Force created to explore the measurement of quality in 1990 identified over 200 indicators of quality in family planning services (3). This group recommended experimentation with these different indicators based on the philosophy of "let 100 flowers bloom." Subsequently, the USAID-funded EVALUATION Project convened a working group of researchers studying quality of care, and this group reduced the list to 42 process indicators (4).

The successor project, MEASURE *Evaluation,* developed and field-tested a low-cost, practical approach to monitoring quality of care, later named the "Quick Investigation of Quality" (QIQ).[†] To this end, staff used a modified Delphi approach to arrive at a short list of 25 indicators of quality of care for family planning programs. Three instruments were developed that draw directly from Situation Analysis: a facility audit, an observation of the client-provider interaction, and an exit interview with clients leaving the facility (5). These instruments were field tested in four countries (Ecuador, Turkey, Uganda, and Zimbabwe) between October 1998 and March 1999 to determine the feasibility of data collection and reliability of the data.

At a time when the conduct of facility-based surveys is on the rise, the field test data provide an excellent opportunity to address a question of critical importance: do observation of client-provider interaction and exit interviews with clients yield consistent

[†] The QIQ was developed in collaboration with the Monitoring and Evaluation Subcommittee of the MAQ (the USAID-funded initiative for Maximizing Access and Quality).

results? This question is particularly pertinent in the context of QIQ for two reasons. First, consistency in results between the two instruments would lend credibility to the QIQ package of instruments, suggesting that they do measure what they purport to measure. Second, it would have important cost implications for the future conduct of such studies, if it were sufficient to administer only one of the two rather than both.

It should be stressed that the two instruments differ in terms of the type of information they are best suited to capture. Observation is useful in measuring the accuracy and thoroughness of information imparted during counseling and in assessing the technical competence of the provider (which the client is generally not able to do). By contrast, the exit interview is the only instrument (of the three used in QIQ) that taps the client's perspective on the services received. However, the two converge when clients report on the providers' actions during counseling and clinical examination.

Both methods have limitations (6). Observation introduces the potential bias that service providers will perform better than they might under naturalistic conditions. Indeed, Ndhlovu found evidence from the Kenya Situation Analysis that the performance of providers increased from days 1-3 during a week of observation, then declined, suggesting that it was not possible to remain on "best behavior" indefinitely (7). Exit interviews have their own set of problems; the most serious of which is courtesy bias. Clients may feel that the interviewer wants positive feedback on the services, or they may be reluctant to say anything negative regarding services for fear of its getting back to the providers (8). Clients may have such low expectations about services that their

positive comments may in fact reflect their true feelings. Finally, clients may simply want to complete the interviewer quickly to get home, and give answer "of least resistance."

Our approach to assessing the comparability of results from these two instruments in three countries was as follows.

Methodology

QIQ Methodology

As mentioned above, the QIQ methodology consists of three instruments: an observation of the client-provider interaction, an exit-interview with the client, and a facility inventory[‡]. For the first instrument, a trained observer (who usually wore a white coat to blend into the service delivery environment) obtained consent from both the provider and client to be present during individual counseling and clinical examination. She used an observation guide to record yes/no answers to a series of actions reflective of quality of care (questions that the provider should ask, points of information that should be covered, clinical procedures that should be used in administering certain contraceptives, etc.) As the client left the facility after her visit, an interviewer approached her to ask if she could interview her about the visit and her satisfaction with the services received. The interviewer explained to the client that she did not work for the clinic; that all responses

[‡] The facility inventory will not be discussed further in this paper.

would remain confidential; and that her answers would in no way affect her getting services in the future. Assuming she obtained consent, the interviewer then proceeded to ask her a series of questions (which usually took about 20 minutes).

Three of the four countries that participated in the QIQ field test (Ecuador, Uganda, and Zimbabwe) implemented both the client-provider observation and the client exit-interview. The instruments used in the three countries were almost identical although questionnaires for the exit interviews were translated into the local languages in each country. Clinically trained staff, nurses and midwives in Uganda and Zimbabwe, and physicians in the case of Ecuador, conducted the client-provider observation and social workers and sociologists conducted the exit-interviews. Data collection staff in each country underwent a one-week training on the instruments and methodology that included a pilot test of the instruments. All data collection staff was female.

The types of facilities included in the study differed across the three countries, but these differences should not affect the research question under discussion. In Ecuador, the sample consisted of all 43 family planning facilities run by two non-governmental organizations (NGO's): Asociación Pro-bienestar de la Familia Ecuatoriana (APROFE) and Centro Médico de Orientación y Planificación Familiar (CEMOPLAF). The Uganda study used a probability sample of 72 public facilities located in 10 districts receiving support from the Delivery of Improved Services for Health (DISH) project and in three districts not receiving support from DISH. Finally, in Zimbabwe, all 39 facilities

receiving support from the Family Planning Service Expansion and Technical Support Project (SEATS) were surveyed.

Analysis

During the data collection process, unique identifying information was recorded on the observation and exit-interview forms for each client. These unique identifiers were used to link the data from the two instruments for each client and linked data from the three countries were then combined for the purposes of this analysis. Matching of the observation and exit-interview data resulted in a dataset of 1851 family planning clients. In Ecuador, 586 observations and exit-interviews were conducted and linking of the files resulted in 583 clients (99%) with data from both sources. In Zimbabwe, 753 clients were observed and 742 were interviewed. Linking of the files resulted in 685 clients with matched data from both instruments (91% of the clients observed). In Uganda, 549 clients were observed and interviewed and linking of the files resulted in 539 (98%) of the clients with complete data.

Of the original 25 quality of care indicators, 10 were measured both by observation and exit-interview. Additional questions also appeared on both instruments. In some cases, the question was virtually the same on the observation form and in the exit interview (e.g., did the provider given instructions on when to return?). In others, the question dealt with the same action or issue, but required a subjective judgment that could well differ between observer and client (e.g., did the provider treat the client with respect?). In a

third case, the questions were on a similar topic, but were not in fact the same. For example, one item on the observation was "provider assured client of confidentiality." The parallel item on the exit interview asked whether the client felt that her information would be kept confidential. Just because the provider gave her reassurances of confidentiality does not mean that she necessarily believed that it would happen. This analysis includes all items for which similar (if not the same) questions were asked on the two instruments.

The first step of the analysis consisted of comparing frequencies on those indicators available from both instruments in each of the three countries. Data from all three countries were then combined. Simple agreement on each indicator was calculated as the proportion of responses in which the observation and exit-interview results were in agreement. Kappa coefficients were calculated to correct for the proportion of responses that would be in agreement due to chance alone. Given that Kappa becomes low when the prevalence deviates from 50% and many of the indicators were highly skewed to positive responses, we report prevalence and bias adjusted Kappa coefficients (9). We assessed evidence of bias or systematic error using McNemar's test for bias. Standards for rating agreement beyond chance based on Kappa are as follows: 0-.40 poor agreement, .40-.74 fair to good agreement, .75-1.00 excellent agreement (10).

Results

The clients' characteristics, which may have an influence on the clients' ability to accurately report information from the visit, varied somewhat between the three countries. Overall, almost one-half of the family planning clients were between 24 and 35 years of age and less than one in five were older than 35 years of age. Age patterns were similar across countries. Educational levels, however, varied. Education levels were highest in Ecuador where 67% of clients had attended at least secondary school and lowest in Uganda where only 40% of clients had advanced beyond primary school. Reasons for coming to the clinic were similar. Just over one-quarter of the clients in each of the three countries were considered to be new family planning clients (defined in this study as clients coming to the facility for a family planning method for the first time, clients restarting a method after not using the method for more than six months, clients switching methods, or clients making their first visit to the facility). There were, however, substantial differences in the contraceptive method received. In Ecuador, the IUD predominated with 43% of clients receiving an IUD during the visit. Other frequently prescribed methods were the injectable (21%) and the pill (17%). In Uganda, 71% of clients received the injectable and 22% the pill. Few clients in Uganda received any other type of family planning method. In Zimbabwe, most clients (62%) received the pill, 35% the injectable, and 3% other contraceptive methods.

Interpersonal Relations

Indicators that measure the provider's ability to create a positive environment for counseling and clinical examination for each of the three countries are presented in Table 1. Virtually all clients were treated with respect, and results on this indicator were highly consistent between observation and client exit-interviews for all three countries. Results on whether or not there was privacy for counseling and the pelvic examination were also similar between the observation and exit-interview. Consistency across instruments was considered good to excellent for Ecuador and Zimbabwe. Consistency was lower on these indicators in Uganda, but still considered good. Where disagreement occurred, this is primarily due to clients reporting that privacy was inadequate while the observer noted the opposite. In Ecuador, for example, most observers (99%) recorded that the pelvic examination was conducted in privacy, but fewer clients (93%) were of this opinion.

Data on confidentiality were available on both instruments only from Uganda. For this indicator, there was poor agreement between the two data sources. Although 54% of the observers noted that the provider assured the client that information given would be confidential, 86% of clients reported that they felt that the information would remain confidential. It should be noted, however, that the exit-interview measure whether or not the client *felt* that the information would remain confidential rather than whether she was told that it would remain confidential, as was measured in the observation.

Returning clients were to be asked whether they had any concerns or problems. In Ecuador and Uganda (there were no data available on this indicator for Zimbabwe), there

was good consistency between responses from the observation and exit-interview. In Ecuador, observers noted that the provider asked 84% of clients if there were any problems or concerns, whereas 87% of respondents in the exit-interview answered in the affirmative. In Uganda, these percentages were 87% and 85% respectively.

Table 1 also shows whether or not the provider's discussed HIV/AIDS with the client. Frequencies from the exit-interview were generally higher than from the observation. In Ecuador, 13% of clients received information on HIV or STD's based on observation results as compared to 27% of clients based on exit-interview results. In Uganda, 22% of clients received this information based on observation results, and 30% based on exit-interview results. In Zimbabwe, results for all clients were similar, 11% and 14% respectively. The majority of the discrepant responses were for clients who were recorded as not receiving this information during the observation, but who did report receiving information on HIV/AIDS when asked during the exit-interview.

During the fieldwork, it was found that clients received information during their visit to the health facility from other sources in addition to the provider. In Ecuador, information was provided in a separate counseling session (either one-on-one or in a group) conducted by social workers and health educators prior to the visit with the provider. In Uganda, approximately 50% of new clients attended group talks that covered family planning methods and HIV/STD prevention before seeing the provider. Group talks were also a frequent occurrence at facilities in Zimbabwe. As the client-provider observation did not include information given to clients in these other setting, it is not surprising that

the frequencies for the indicators measuring whether information provided during the visit are higher on the exit-interview than what was found during the observation.

An important indicator for continuity of care is whether or not the provider gave the client some sort of instruction regarding her return to the facility. This indicator was highly consistent for Ecuador and Uganda across the instruments. Results from the observation and exit-interviews in Ecuador report that 94% and 96% of clients, respectively, discussed the return visit with the provider. The percentage of clients in Uganda was 94% on both instruments. In Zimbabwe, agreement on this indicator was fair, with a higher percentage reported on the observation than on the exit-interview (83% as compared to 72%).

Method Choice

Indicators specific to new family planning clients are presented in Table 2. The provider should ask new clients about their fertility intentions in order to assist the client in selecting the most appropriate family planning method. During the observation, it was noted whether or not the provider and client discussed her desire for more children or the timing of the next child. During the exit-interview, the client was asked if the provider asked her whether or not she would like to have more children. Poor agreement was seen for this indicator in each of the three countries. Although results from the observation and exit-interview were comparable, 53% and 63% in Ecuador for example, there was a lack of agreement between the two instruments for many of the clients.

Consistency on whether or not the preferred method was discussed during the visit was very good for both Ecuador and Zimbabwe, with percent agreement at 98% and 88% for the two countries, respectively, and very similar frequencies on responses from the two instruments within each country. In Uganda, however, consistency was poorer with 69% of responses being in agreement on this indicator and Kappa indicated only poor to fair agreement.

In two of the three countries, Ecuador and Uganda, the percent of women who stated during the exit-interview that they received their preferred method was slightly higher than what was recorded during the observation. In Ecuador, 80% and 84% of clients with a method preference received their preferred method based on results from the observation and exit-interview, respectively. In Uganda, 72% of these clients were observed to receive their preferred method as compared to 81% during the exit-interview. Results were more similar in Zimbabwe where 87% and 85% of clients, respectively, received their preferred method. Percent agreement was 90% or greater for both Ecuador and Zimbabwe and only slightly lower for Uganda (82%).

Information Given to New Clients

Information given to new family planning clients who accepted a method is also presented in Table 2. Whether or not the client received information on how to use the accepted method was gathered two ways during the exit-interview. The clients were first asked whether or not the provider told her how to use the method. The client was also

asked to provide information on how her selected method is used as a way of validating whether correct information on the method was given. For example, pill users were asked, “How often do you take the pill?” In the observation, it was noted only whether correct information was given to the client on how to use the selected method.

On the indicator on whether the provider told the client how to use the method, consistency across instruments for Ecuador and Uganda was good (agreement of greater than 84%) and slightly less so for Zimbabwe (70%). In Ecuador, almost all of the discrepant responses were for women for whom a “no” was recorded on the observation guide but who did report receiving this information during the exit-interview. Information on how to use the method may have been given to women during a supplemental counseling session not covered by the client-provider observation. There was no such pattern for discrepant responses in Uganda and Zimbabwe.

With respect to the accuracy of the information on the method, in both Uganda and Zimbabwe, 94% and 84% of clients, respectively, were given accurate information on using the method based on results from the observation. A higher percentage of clients, however, 100% and 97% respectively, could accurately respond to the question on how to use the method during the exit-interview. The converse was true in Ecuador where 83% of clients were told how to use the method based on observation, but only 75% could correctly answer the question posed during the exit-interview. These differences may reflect differences in the client’s baseline knowledge of the method, or they may be associated with the knowledge required for a particular method; most clients in Ecuador

received the IUD whereas most clients in Uganda and Zimbabwe received the pill and the injectable.

A comparison of the results from the observation and exit-interview for whether the client received information on the side effects of the method shows moderate agreement for this indicator in each of the three countries. Percent agreement ranged from 71% to 75% with approximately a 10% spread in the results from the observation and exit-interview in Ecuador and Uganda, and a smaller difference in Zimbabwe.

Results from observation and exit-interview were much less comparable for the indicators that measured whether the provider mentioned that the accepted method, other than condoms, does not protect against HIV, and whether she encouraged dual method use. In all three countries, the frequencies of positive responses were higher on the exit-interview than on the observation. For example, based on observation data in Ecuador, 19% of clients were told that the method, other than condoms, does not protect against HIV infection. This is compared to 34% of clients in the exit-interview. In Uganda, 40% of clients received this information based on the observation results and 56% based on the exit-interview results. In Zimbabwe, the difference was larger, 9% based on observation data as compared to 52% based on exit-interview data. Percent agreement for results from the two instruments was 73% and 63% for Ecuador and Uganda respectively and only 54% for Zimbabwe. Approximately 75% of the discrepant results in Ecuador and Uganda and 97% in Zimbabwe are from “no” responses on the observation but “yes” responses on the exit-interview. In other words, the observers did not note that this

information was given to the client during her contact with the provider yet the client reports that she received this information. Similarly patterns were found for whether or not the provider encouraged dual method use. As for the previous indicator, most of the discrepant results (greater than 76%) were due to negative responses on the observation and positive responses on the exit-interview. As previously described, information on HIV/STD prevention may have been given to clients in counseling sessions and group talks that were not covered by the client-provider observation.

Agreement on Indicators by Question Type

Table 3 presents data for all three countries combined. We have reorganized the indicators to reflect the type of question and degree of comparability of the questions between the instruments. In addition to measures of agreement for the three countries combined, we have also presented an assessment of bias or systematic error. Bias was considered to be present if one instrument consistently rated the indicator higher (or lower) than did the other instrument.

The first set of indicators includes what we considered to more objective measures of the provider's actions with the client. This category includes questions such as "Did the provider discuss the return visit?" Agreement on these indicators ranged from fair to good (kappa .30-.71). Only for the indicator that measured whether the return visit was discussed was there any evidence that one instrument rated the indicator higher than the

other. This is due to the data from Zimbabwe where clients greatly under-reported being told about the return visit during the exit-interview.

We also considered a second set of indicators to be objectively measured. These indicators measure the information exchange that occurred between the client and provider on different topics. Whether or not HIV/AIDS was discussed is one example. All but one of these indicators is classified as having fair to good agreement.
As discussed, there is systematic error evident in comparing results from the two instruments for some of these indicators. Frequently, the client reported that the topic was discussed yet the topic was not recorded as being discussed during the observation. Information received at the visit outside of the client-provider interaction is likely responsible for this bias.

The third set of indicators were those that were deemed to involve more subjectivity in their measurement. Surprisingly, agreement between results from the observation and exit-interviews was strong, and was actually higher than for the more objective indicators previously listed. For the two indicators that assessed whether privacy was adequate, the exit-interview gave consistently lower measures of privacy than did the observation. Discrepancies between instruments were due to fewer clients reporting adequate privacy than what was reported by the observer. The observer's familiarity with the health care system and its norms may, for example, provide her with a different perception of what constitutes privacy than a client. Effective training of the observer can reduce inter-rater reliability, but it cannot eliminate this difference in perception between client and

observer. For the remaining two indicators, there was no evidence of bias in the responses.

Finally, two indicators were classified as being different questions and less than comparable on the two instruments. The most obvious example, and the indicator with lowest agreement between the instruments, was the indicator that measured confidentiality. The observer recorded whether or not the provider assured the client of confidentiality. During the exit-interview, however, the client was asked whether information she shared with the provider would be kept confidential. Whether or not confidentiality is assured and whether or not the client believes that confidentiality will be maintained are really two different measures. For the second indicator, whether the provider gave accurate information on how to use the method, there was some evidence of higher results from the exit-interview. This is primarily due to new clients in Uganda and Zimbabwe who correctly reported key information on how to use the method received yet the provider was not observed providing accurate information to the client. The exit-interview measured the client's knowledge of the method, which may have been obtained during the visit with the provider. It is likely that in many cases, however, that the clients knew the correct information already or obtained the information from other sources at the health facility.

Agreement on the 15 indicators for the three countries combined is presented in Figure 1. Percent agreement ranged from 55 to 99 percent, indicating moderate agreement at one end of the spectrum to very strong agreement at the other. Both percent agreement and

Kappa coefficients (which ranged from .11 to .98) gave very similar findings for the indicators.

Discussion

Sources of Error

Overall, the results showed a high level of comparability in the results obtained from observation and client exit interviews for most indicators. To the extent that discrepancies occurred, the major reason for these discrepancies was that information was given to clients outside the observed client-provider interaction. As the observation methodology was designed to capture information given during a client's visit with the provider, information given during group talks and in supplemental counseling sessions is not recorded on the observation form. Although the questions on the exit-interview usually referred to the provider specifically (e.g., "did the provider tell you …), it is not realistic to expect the client to differentiate between information given by the provider and information received during group talks or other counseling sessions. These additional sources of information need to be taken into consideration in interpreting the results in this study and in using these instruments in the future.

Some of the chosen indicators capture objective, measurable events whereas others are designed to measure subjective states such as attitude, opinions, or feelings. An example of the former is whether the provider gave the client information on the side effects of the method; for the latter, whether or not counseling was conducted in privacy. One may

expect that comparability between objective measures would be greater than from the subjective measures. We did not find this to be true during the analysis of these data. In fact, agreement was highest on the indicators that were judged to be more subjective.

Other sources of error are also possible. Recall bias may account for a client's "forgetting" that a specific instruction or information was provided during the visit. Given that the client is interviewed immediately following the visit, she may not have had time to think about the session and process all of the information that she received. This can be seen with indicators that are measured similarly in both instruments; whether the provider asked the client about her fertility intentions, is an example. Though the questions are relatively straightforward, there were clients who reported that this was discussed while it was not and vice-versa.

The authors also considered whether interviewer fatigue could have been a source of error during the exit-interviews. Interviewer fatigue and a desire to terminate the interview quickly may have introduced two different types of error. The client may have provided any response in order to hurry along the interview, resulting in an increase in discordant responses in the latter half of the exit-interview. Or, she may have provided what she feels may be the correct response, often a yes, in hopes of quickly terminating the interview. This would have resulted in a bias toward more positive responses in the second half of the interview. After examining the data from the three countries, there was no relationship with percent agreement (or disagreement) on the instruments and whether

the questions appeared earlier or later in the interview. Neither was there any evidence of more biased responses if the questions appeared in the latter half of the exit-interview.

We also considered differences in client characteristics as a source of potential error that may explain differences in agreement by country. Uganda which had the lowest percent agreement for all of the indicators combined (78% as compared to 83% for Ecuador and Zimbabwe) also had the clients with the lowest levels of education. An analysis of agreement on indicators by the clients' educational status did show that agreement on many of the indicators was slightly lower among those clients who had not attended secondary school (results not shown). Although education level may be a factor, other factors are probably more important in accounting for differences in agreement between countries. Another major difference between the countries was the predominant family planning method used. This should, however, have only affected the questions where the client was asked to provide information on how to use the method.

A final consideration was whether the stigma associated with STD's and HIV may have prohibited some clients from mentioning that these topics were discussed during the session. Results from this analysis do not support this assertion. A larger percentage of clients reported that information on these topics was discussed during the exit-interview than what was recorded during the observation – primarily because the clients remembered receiving information in group talks and previous counseling sessions.

Reliability of the Instruments

Although the level of quality differed by country on a number of the indicators, there was strong comparability on the instruments for a given country. In many cases, results from the observation and exit-interview were extremely close. Percent agreement and Kappa coefficients indicated moderate to good agreement on many of the indicators. This comparability of results across instruments within a country provides evidence that the instruments are reliable and valid. As a monitoring tool, either method could be used to calculate many of these indicators – as long as a distinction is made about source of information – the main source of discrepancies in this study. As an assessment tool, it also shows that similar conclusions on the quality of care available would have been reached regardless of the data collection instrument and methodology used

Observation or Client-exit interview?

Given the comparability of many of the indicators, it could be argued that there is no need to implement both the observation and the client interview. Although the tools for data collection are not interchangeable, there can be considerable overlap between the two measurement methods. As such, programs may decide to reduce the costs and complexity of data collection by implementing only one of the two instruments.
The QIQ, however, was designed to capture a short-list of quality indicators for monitoring family planning programs and the combined use of the three data collection instruments allows for the full set of indicators to be obtained. Selecting only the client-provider observation would eliminate those indicators that capture the clients' perspective

on the care received. Selecting only the exit-interview on the other hand would not permit an assessment of the provider's technical competence during counseling and clinical examination. Therefore, although one instrument may be selected over another where resources are limited, there is a cost in the breadth of indicators that will be available to measure quality. While some organizations may not opt to utilize all instruments, the contribution of all three instruments to measuring quality of care must be recognized.

Figure 1. Comparability of 15 indicators obtained using observation and client exit-interview from Ecuador, Uganda, Zimbabwe.

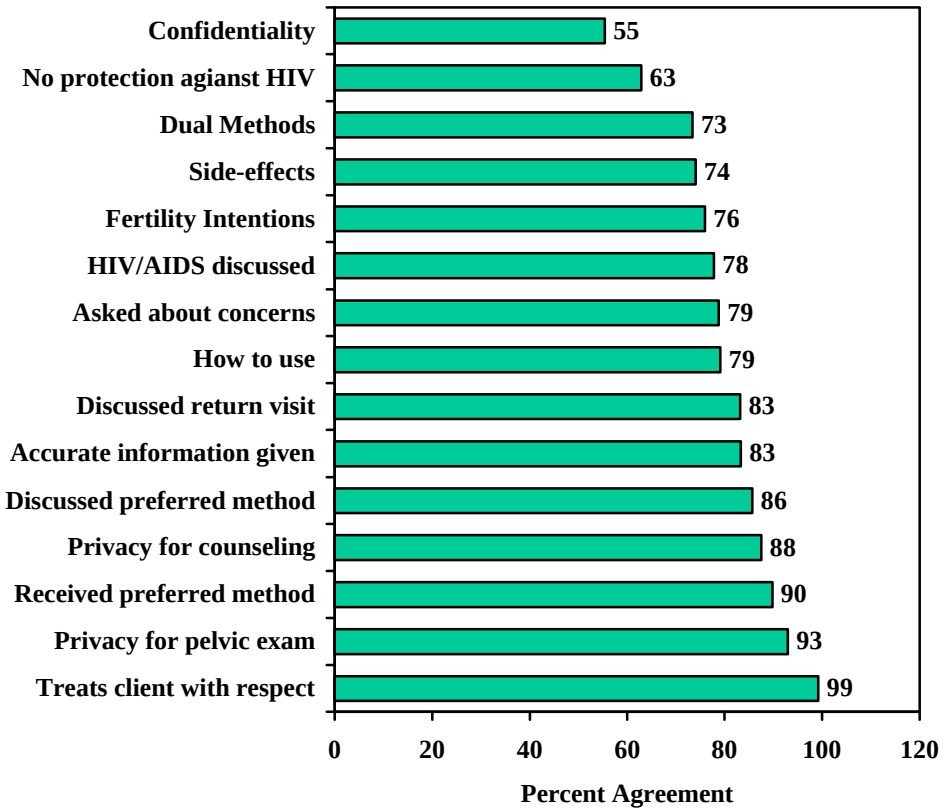

Table 1. Comparison of indicators measuring the providers' counseling skills obtained from observation and client exit-interview in Ecuador, Uganda, and Zimbabwe. The Quick Investigation of Quality Study, 1999.

	Ecuador (n=583)				Uganda (n=539)				Zimbabwe (n=685)			
	Observ	Interv	Agree-ment	Kappa§	Observ	Interv	Agree-ment	Kappa	Observ	Interv	Agree-ment	Kappa
Treats client with respect	99.7%	100%	99.7%	.99	99.1%	99.6%	98.9%	.98	99.3%	99.4%	99.0%	.98
Sees client in private for counseling	99.3%	87.1%	86.8%	.74	87.1%	88.1%	81.8%	.63	96.9%	94.9%	92.4%	.85
Privacy for pelvic exam/IUD insertion‡	99.5%	92.8%	92.6%	.85	95.4%	81.8%	82.4%	.65	97.3%	98.0%	97.1%	.94
Assured client of confidentiality	n/a	91.1%	-	-	59.5%	86.4%	55.4%	.11	n/a	92.6%	-	-
Ask clients is she has any concerns or problems †	83.7%	86.9%	76.8%	.54	87.3%	86.1%	80.6%	.61	n/a	n/a	-	-
Discusses STDs or HIV/AIDS	13.4%	27.3%	78.6%	.57	22.4%	29.6%	68.9%	.38	11.1%	14.2%	83.9%	.68
Discusses the return visit	94.2%	96.2%	90.7%	.81	93.7%	93.5%	90.6%	.81	83.0%	72.4%	70.6	.41

n/a: not available; †: Returning clients only, Zimbabwe excluded as this question was asked only of the 25 clients who came to the clinic reporting a problem, Ecuador (n=393), Uganda (n=361); ‡ Ecuador (n=403), Uganda (n=34), Zimbabwe (n=138); § Prevalence and bias adjusted Kappa

Table 2. Comparison of indicators measuring the providers' actions with new family planning clients from observation of the client provider interaction and client exit-interview in Ecuador, Uganda, and Zimbabwe. The Quick Investigation of Quality Study, 1999.

	Ecuador (n=145)				Uganda (n=123)				Zimbabwe (n=180)			
	Observ	Interv	Agree-ment	Kappa §	Observ	Interv	Agree-ment	Kappa	Observ	Interv	Agree-ment	Kappa
Provider discussed client's fertility intentions	53.1%	63.3%	61.6%	.23	63.4%	53.3%	62.8%	.26	38.7%	35.2%	70.2%	.40
Client received her preferred method †	79.5%	83.5%	90.8%	.82	71.6%	80.9%	81.8%	.64	87.3%	84.6%	94.1%	.88
Provider discussed client's preferred method †	99.2%	98.1%	97.7%	.95	73.3%	88.3%	69.1%	.38	88.0%	91.9%	88.2%	.76
Provider told the client how to use the method	83.1%	97.2%	84.8%	.70	93.6%	92.9%	88.6%	.77	84.0%	79.9%	70.3%	.64
Provider gave accurate information on how to use method	84.8%	75.2%	75.2%	.50	93.2%	100%	93.7%	.78	83.9%	96.7%	82.9%	.66
Provider gave information on side-effects	71.0%	80.0%	74.5%	.49	84.8%	74.0%	78.4%	.57	68.2%	62.8%	70.7%	.41
Provider explained method does protect against HIV/AIDS‡	19.2%	33.9%	73.1%	.46	39.7%	55.7%	63.3%	.27	8.5%	51.6%	54.2%	.08
Provider encouraged dual method use‡	19.1%	36.6%	74.1%	.48	25.9%	47.6%	62.4%	.25	45.8%	56.1%	80.9%	.62

† new clients with a method preference, Ecuador (n=109), Uganda (n=88), Zimbabwe (n=135); ‡ new clients not using condoms, Ecuador (n=131), Uganda (n=123), Zimbabwe (n=157); § Prevalence and bias adjusted Kappa

Table 3. Agreement of indicators measuring the providers' counseling skills obtained from client-provider observation and client exit-interview in three countries. The Quick Investigation of Quality Study, 1999.

	n	Observ	Interv	Agreement	Kappa*	Evidence of Bias**
Provider actions with client (objective)						
Provider discussed client's preferred method ‡	356	88.0%	88.4%	85.7%	.71	no
Discusses the return visit	1790	89.8%	86.3%	83.1%	.66	yes
Ask clients is she has any concerns or problems †	753	86.2%	86.2%	78.8%	.57	no
Ask client about her fertility intentions	496	50.8%	50.2%	65.1%	.30	no
Information Given to client (objective)						
Provider told the client how to use the method	405	86.1%	89.4%	79.1%	.69	no
Discusses STD's or HIV/AIDS	1785	15.2%	23.0%	77.8%	.56	yes
Provider gave information on side-effects	430	73.1%	71.4%	74.0%	.48	no
Provider encouraged dual method use §	398	30.3%	45.9%	73.4%	.47	yes
Provider explained method does not protect against HIV/AIDS§	394	20.9%	46.0%	62.9%	.26	yes
Interpersonal relations (subjective)						
Treats client with respect	1804	99.7%	99.7%	99.2%	.98	no
Client received her preferred method ‡	332	80.1%	84.7%	89.8%	.80	no
Sees client in private for counseling	1804	94.8%	90.4%	87.5%	.75	yes
Privacy for pelvic exam/IUD insertion	575	98.7%	92.8%	93.0%	.86	yes
Different Questions						
Assured of confidentiality/ believed to be confidential	525	59.5%	86.4%	55.4%	.11	yes
Provider gave accurate information on how to use method	418	86.1%	91.0%	83.3%	.67	yes

† returning clients only, Zimbabwe excluded, ‡ new clients with a method preference, § new clients not using condoms, * Prevalence and bias adjusted Kappa., ** McNemar's test for bias, $p<.05$

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